

CLAIMS

1. A record control apparatus comprising:

a buffer for storing moving image data belonging to a
5 chapter,

storage size detecting means for detecting that the
moving image data stored in the buffer increases in size
beyond a first size and then reaches a second size,

final data detecting means for detecting that the final
10 moving image data belonging to the chapter is stored in the
buffer, and

moving image object output means for retrieving a
portion of the moving image data, stored in the buffer,
corresponding to the first size from the head of the moving
15 image data, and outputting the portion of the moving image
data as a moving image object if it is detected that the
moving image data stored in the buffer reaches the second
size, and retrieving the whole moving image data stored in
the buffer and outputting the retrieved moving image data as
20 a moving image object if it is detected that the final
moving image data belonging to the chapter is stored in the
buffer.

2. The record control apparatus according to claim 1,
wherein the storage size detecting means comprises:

25 size measurement means for measuring the size of the

moving image data stored in the buffer,

time measurement means for measuring time by converting,
into time, the size of the moving image data stored in the
buffer, and

5 threshold detecting means for detecting that the time
measurement means detects the second size after the size
measurement means detects the first size.

3. The record control apparatus according to claim 2,
wherein the storage size detecting means further comprises
10 threshold holding means for holding the first size and the
second size and supplying the threshold detecting means with
the first size and the second size.

4. The record control apparatus according to claim 3,
further comprising threshold setting means for setting the
15 first size of the moving image object as a standard size of
the moving image object, and the second size of the moving
image object as a lower limit value of the moving image
object for seamless connection in the threshold holding
means.

20 5. The record control apparatus according to claim 1,
wherein the moving image object output means comprises
packing means for dividing the moving image data retrieved
from the buffer into packs, each pack having a fixed length,
and

25 multiplexing means for multiplexing the packed moving

image data and outputting the multiplexed moving image data as the moving image object.

6. An encoding system comprising:

moving image encoding means for encoding a moving image
5 signal and outputting the encoded moving image signal as moving image data,

audio encoding means for encoding an audio signal and outputting the encoded audio signal as audio data,

a buffer for storing the moving image data belonging to
10 a chapter,

storage size detecting means for detecting that the moving image data stored in the buffer increases in size beyond a first size and then reaches a second size,

final data detecting means for detecting that the final
15 moving image data belonging to the chapter is stored in the buffer,

moving image object output means for retrieving a portion of the moving image data, stored in the buffer, corresponding to the first size from the head of the moving
20 image data, multiplexing, as a moving image object, the retrieved portion of the moving image data and the audio data, and outputting the moving image object if it is detected the size of the moving image data stored in the buffer reaches the second size, and retrieving the whole
25 moving image data stored in the buffer, multiplexing, as a

moving image object, the retrieved moving image data and the audio data, and outputting the moving image object if it is detected that the final moving image data belonging to the chapter is stored in the buffer.

5 7. A record control method of a record control apparatus having a buffer storing moving image data belonging to a chapter, comprising:

 a step of encoding the moving image data and outputting successively the encoded moving image data to the buffer,

10 a step of detecting that the moving image data stored in the buffer increases in size beyond a first size and then reaches a second size,

 a step of retrieving a portion of the moving image data, stored in the buffer, corresponding to the first size from
15 the head of the moving image data, and outputting the retrieved portion of the moving image data as a moving image object if it is detected that the size of the moving image data stored in the buffer reaches the second size,

 a step of detecting that the final moving image data
20 belonging to the chapter is stored in the buffer, and

 a step of retrieving the whole moving image data stored in the buffer and outputting the retrieved moving image data as a moving image object if it is detected that the final moving image data belonging to the chapter is stored in the
25 buffer.

8. A record control method of a record control apparatus having a buffer storing moving image data belonging to a chapter, comprising:

5 a step of setting a first size of the moving image object as a standard size of a moving image object, and a second size of the moving image object as a lower limit value of the moving image object for seamless connection,

a step of encoding the moving image data and outputting successively the encoded moving image data to the buffer,

10 a step of detecting that the moving image data stored in the buffer increases in size beyond the first size and then reaches the second size,

a step of retrieving a portion of the moving image data, stored in the buffer, corresponding to the first size from
15 the head of the moving image data, and outputting the retrieved portion of the moving image data as a moving image object if it is detected that the size of the moving image data stored in the buffer reaches the second size,

a step of detecting that the final moving image data
20 belonging to the chapter is stored in the buffer, and

a step of retrieving the whole moving image data stored in the buffer and outputting the retrieved moving image data as a moving image object if it is detected that the final moving image data belonging to the chapter is stored in the
25 buffer.

9. A program for causing a computer to perform a record control method of a record control apparatus having a buffer storing moving image data belonging to a chapter, comprising:

5 a step of encoding the moving image data and outputting successively the encoded moving image data to the buffer,

 a step of detecting that the moving image data stored in the buffer increases in size beyond a first size and then reaches a second size,

10 a step of retrieving a portion of the moving image data, stored in the buffer, corresponding to the first size from the head of the moving image data, and outputting the retrieved portion of the moving image data as a moving image object if it is detected that the size of the moving image data stored in the buffer reaches the second size,

15 a step of detecting that the final moving image data belonging to the chapter is stored in the buffer, and

 a step of retrieving the whole moving image data stored in the buffer and outputting the retrieved moving image data as a moving image object if it is detected that the final moving image data belonging to the chapter is stored in the buffer.

10. A program for causing a computer to perform a record control method of a record control apparatus having a buffer storing moving image data belonging to a chapter,

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comprising:

- 5 a step of setting a first size of the moving image object as a standard size of a moving image object, and a second size of the moving image object as a lower limit value of the moving image object for seamless connection,
- a step of encoding the moving image data and outputting successively the encoded moving image data to the buffer,
- a step of detecting that the moving image data stored in the buffer increases in size beyond the first size and
10 then reaches the second size,
- a step of retrieving a portion of the moving image data, stored in the buffer, corresponding to the first size from the head of the moving image data, and outputting the retrieved portion of the moving image data as a moving image
15 object if it is detected that the size of the moving image data stored in the buffer reaches the second size,
- a step of detecting that the final moving image data belonging to the chapter is stored in the buffer, and
- a step of retrieving the whole moving image data stored
20 in the buffer and outputting the retrieved moving image data as a moving image object if it is detected that the final moving image data belonging to the chapter is stored in the buffer.